TABLE 5

## Bell Atlantic Corporation Annual Rates of Retirement on Service Pension Male Employees

Associate

	<del></del>							
Service in years		for emplo	oyees en		g year t ervice at	t specim	en ages	
t	15	20	25	30	35	40	45	50
14 15 17 18 19 20 21 22 22 22 22 22 23 33 33 33 34 44 44 45 46 47 48 49 50 51 51 53 54	.0210 .0180 .0195 .0210 .0225 .0255 .0270 .0315 .0405 .0520 .0680 .0620 .0680 .0790 .0160 .3510 .4110 .2830 .5000 .3000 .3000 .3000 .3000 .9903	.0280 .0195 .0270 .0345 .0390 .0460 .0530 .0590 .0640 .0730 .0910 .1080 .3300 .3930 .2720 .5000 .3000 .3000 .3000	.0160 .0150 .0160 .0170 .0190 .0320 .0390 .0430 .0540 .0540 .2850 .3540 .2520 .5000 .3000 .3000 .3000 .9903	.0330 .0260 .0280 .0360 .0430 .0500 .2540 .3190 .2350 .5000 .3000 .3000 .3000 .9903	.0550 .0420 .0330 .0410 .0440 .0560 .2270 .2930 .2200 .5000 .3000 .3000 .3000 .9903	.0900 .0650 .2090 .2790 .2060 .3000 .3000 .3000 .9903	.0600 .0600 .0600 .5000 .3000 .3000 .3000 .9903	.5000 .3000 .3000 .3000 .9903



TABLE 6

## Bell Atlantic Corporation Annual Rates of Retirement on Service Pension

#### Female Employees

Associate

Service in years	Rates of retirement during year t + .5 to t + 1.5 for employees entering service at specimen ages								
t	15	20	25	30	35	40	45	50	
14 15 16 17 18 19 20 12 22 23 24 22 26 27 28 29 30 31 23 33 34 35 36 37 38 39 40 41 44 44 44 44 45 46 47 48 48 55 55 55 55 56 56 56 56 56 56 56 56 56	.0600 .0510 .0510 .0530 .0590 .0650 .0710 .0790 .1170 .1160 .1210 .1270 .1330 .1460 .1550 .3660 .4080 .3280 .5000 .3000 .3000 .3000 .9949	.0780 .0550 .0650 .0700 .0830 .0990 .1040 .1140 .1200 .1320 .1430 .3400 .3810 .3120 .5000 .3000 .3000 .3000 .3000	.0900 .0510 .0520 .0550 .0580 .0870 .0930 .1050 .1180 .1260 .3120 .3460 .2930 .5000 .3000 .3000 .3000 .3000	.1300 .0850 .0900 .1000 .1110 .1160 .2960 .3220 .2790 .3000 .3000 .3000 .3000 .3000	. 1830 . 1090 . 0950 . 0950 . 1070 . 1100 . 2880 . 3100 . 3000 . 3000 . 3000 . 3000 . 9949	. 2500 . 1260 . 2840 . 3030 . 2640 . 5000 . 3000 . 3000 . 9949	.1310 .1310 .1310 .1310 .5000 .3000 .3000 .3000 .9949	.5000 .3000 .3000 .3000 .9949	



TABLE 7

Bell Atlantic Corporation

Annual Rates of Mortality Among Active Employees

Associate

Age x	Rates of M during yea x + .5 to	ar of age	Age x	Rates of Mortality during year of age x + .5 to x + 1.5		
	Male	Female		Male	Female	
15	.0003	.0001	43	.0017	.0008	
16	.0003	.0001	44	.0019	.0009	
17	.0003	.0002	4.5	.0022	.0010	
18	.0004	.0002	46	.0025	.0011	
19	.0004	.0002	4.7	.0028	.0012	
20	.0004	.0002	48	.0031	.0014	
21	.0004	.0002	49	.0035	.0015	
22	.0004	.0002	50	.0039	.0016	
23	.0004	.0002	51	.0043	.0018	
24	-0004	.0002	52	.0048	.0019	
25	.0005	.0003	53	.0052	.0021	
26	.0005	.0003	54	.0057	.0023	
27	.0005	.0003	55	.0061	.0025	
28	.0005	.0003	56	.0066	.0028	
29	.0006	.0003	57	.0071	.0031	
30	.0006	.0003	58	.0077	.0034	
31	.0006	.0004	59	.0084	.0038	
32	.0007	.0004	60	.0092	.0042	
33	.0007	.0004	61	.0101	.0047	
34	.0008	.0004	62	.0111	.0052	
35	.0009	.0005	63	.0124	.0058	
36	.0009	.0005	54	.0139	.0064	
37	.0010	.0005	65	.0156	.0071	
38	.0010	.0006	66	.0176	.0078	
39	.0011	.0006	67	.0198	.0087	
40	.0012	.0007	68	.0222	.0097	
41	.0014	.0007	69	.0248	.0109	
42	.0015	.0008				

TABLE 8

Bell Atlantic Corporation

Annual Rates of Mortality For Associate Service Pensioners

Associate

Age x	Rates of during year x to x +	ar of age	Age x	Rates of Mortality during year of age x to x + 1		
	Male	Female		Male	Female	
			:			
4.5	.033	.022	78	.064	.038	
46	.029	.018	79	.069	.042	
4.7	.024	.015	80	.075	.047	
48	.020	.012	81	.083	.052	
49	.017	.010	82	.091	.054	
50	.014	.008	83	.100	.064	
51	.012	.007	84	.110	.071	
52	.011	.006	85	.121	.079	
53	.011	.006	86	.132	.087	
54	.010	.005	87	.144	.096	
55	.010	.006	88	.157	.105	
56	.011	.006	89	.170	.116	
57	.011	.006	90	.184	.127	
58	.012	.007	91	.198	.140	
59	.013	.007	92	.214	.155	
60	.014	.008	93	.230	.172	
61	.015	.008	94	.247	.192	
62	.016	.009	95	.266	.213	
63	.017	.009	96	. 292	.236	
64	.018	.010	9.7	.318	.262	
65	.020	.011	98	.348	.291	
66	.021	.011	99	.380	.323	
67	.023	.013	100	.415	.358	
68	.026	.014	101	. 454	.357	
69	.028	.015	102	.495	.441	
70	.031	.017	103	.541	.488	
71	.035	.019	104	.591	.541	
72	.038	.021	105	.645	.599	
73	.042	.023	106	.704	.664	
74	.046	. 025	10-	.768	.736	
75	.050	. 028	108	.839	.815	
76	.055	-031	109	.916	.903	
77	.059	.034	110	1.000	1.000	

For ages prior to 45, the mortality rate is assumed constant at that age value.



#### BELL ATLANTIC CORPORATION 1991 ACTUARIAL REPORT

1991 REGULATORY COSTS UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN



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## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### I. INTRODUCTION

This report provides the 1991 results of the annual actuarial valuation for determining the cost on an accrual basis for Bell Atlantic Retiree Group Life Insurance Plan.

The results in this report reflect (1) the adoption of Statement of Financial Accounting Standards No. 106 (SFAS 106) as of January 1, 1991 and (2) the delayed recognition of the transition asset as of January 1, 1991. The transition asset was amortized on a straight-line basis over the average remaining service period of active plan participants. For many years prior to 1991 costs have been determined on an accrual basis using the aggregate cost method.

Company contributions are made in amounts equal to the costs on an accrual basis except that contributions do not reflect death benefits in excess of \$50,000 for those participants who were not "grandfathered" by the provisions of the Deficit Reduction Act (DEFRA) of 1984. (DEFRA is described in Appendix B.) The Company's current funding policy is to make contributions on an accrual basis in a tax effective manner based on the aggregate cost method.

#### II. SUMMARY OF RESULTS

The transition asset and cost for 1991 are as follows (in \$ thousands):

1/1/91 Transition Asset	1991 Cost
\$48,392	\$3.069



## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### II. SUMMARY OF RESULTS (CONTINUED)

Details of the transition asset and the components of the cost are shown on Exhibits I and II. respectively.

The principal assumptions include the following:

- ▶ Discount Rate: 8.00%
- Expected Long Term Rate of Return on Plan Assets: 7.50%
- Pay Growth 5.25%

#### III. TRANSITION OBLIGATION (ASSET)

Exhibit I shows the development of the Transition Obligation (Asset).

In determining the Transition Asset, the Accumulated Postretirement Benefit Obligation (APBO) was reduced by the fair values of plan assets. Since the assets exceeded the APBO this resulted in a Transition Asset.

#### IV. NET PERIODIC POSTRETIREMENT BENEFIT COST

Exhibit II shows the cost components of the net periodic postretirement benefit cost.



## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### IV. NET PERIODIC POSTRETIREMENT BENEFIT COST (CONTINUED)

The net periodic postretirement benefit cost is made up of the following components:

- Service Cost
- ► Interest Cost
- ► (Expected Return on Plan Assets)
- ► Amortization of Transition Asset
- ▶ Amortization of Prior Service Cost
- ► Amortization of (Gains) and Losses

There was no amortization of gains and losses because 1991 was the first year for which costs were determined based on SFAS 106. The transition asset was amortized on a straight-line basis over the average remaining service period of active plan participants of 16.48 years. No prior service cost was established in 1991.

#### V. MARKET-RELATED VALUES OF ASSETS

The market-related value of assets as of January 1, 1991 was set equal to the fair value of plan assets as of that date.



## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### VI. ACTUARIAL COST METHOD

The actuarial cost method is prescribed by SFAS 106. The method is a version of the commonly used Projected Unit Credit Cost Method.

Under the prescribed method, postretirement benefits are allocated to each year of service within the attribution period. The attribution period begins at date of hire unless the plan's benefit formula grants credit for service only after a later date. The attribution period ends at the full eligibility date which is the date the employee has rendered all the service necessary to receive full benefits.

The APBO is the present value of the benefits assigned to years within the attribution period but prior to a certain date. For example, the APBO as of January 1, 1991 is the present value of postretirement benefits allocated to the years of service rendered prior to January 1, 1991.

The service cost is the present value of postretirement benefits assigned to the current year. For example, the 1991 service cost is the present value of benefits assigned to 1991.

The end of the attribution period has already occurred for active participants who have already reached their full eligibility date and for retired participants. As a result, the APBO for each of these two groups is the present value of all future postretirement benefits, and the service cost is zero.



## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### VII. ASSUMPTIONS AS TO FUTURE EXPERIENCE

In order to determine the cost and APBO under SFAS 106, it is necessary to estimate the postretirement benefits that will be paid in future years for currently active employees and retirees and to allocate benefits for active participants to the current year and to years of service rendered before the valuation date. The allocated benefits are then discounted for survivorship and interest to estimate their present values. The process involves the use of actuarial assumptions. The two most important assumptions are the discount rate and the pay growth assumptions. The primary assumptions also include withdrawal rates, disability rates, mortality rates and retirement rates for active employees and mortality rates for retired employees.

#### A. Discount Rates and Expected Long Term Rate of Return on Plan Assets

The discount rate for 1991 is 8% and the expected long term rate of return on plan assets is 7.5%. Both the 3% and 7.5% assumptions were also used to determine the Company's 1991 costs under SFAS 87 for the Bell Atlantic Management Pension Plan and the Bell Atlantic Pension Plan.



## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### VII. ASSUMPTIONS AS TO FUTURE EXPERIENCE (CONTINUED)

#### B. Mortality, Withdrawal, Disability and Retirement Rates

The active mortality, withdrawal, and retirement rates and the postretirement mortality rates used to determine the present values of future postretirement Group Life Insurance benefits are the same rates that were used to determine the Company's 1991 costs under SFAS 87 for the Bell Atlantic Management Pension Plan and the Bell Atlantic Pension Plan. The active mortality and disability rates were revised from the prior year to reflect recent experience. In addition, the retiree mortality rates were revised to reflect the mortality rates contained in the 1991 Telecommunications Mortality Table. (The 1991 Telecommunications Mortality Table reflects recent retiree mortality experience in the Telecommunications Industry including retiree mortality experience of Bell Atlantic Management and Associate retirees.) Tables 1 through 23 show the detailed assumptions.

The rates of separation from service shown on Tables 1 and 2 for Management, Tables 9 and 10 for Associate and Tables 17 and 18 for Enterprises combine the mortality, withdrawal and disability rates.

#### C. Expenses

The cost and APBO include a margin to cover the insurance carrier administrative expenses.



## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### VII. ASSUMPTIONS AS TO FUTURE EXPERIENCE (CONTINUED)

While it is not to be expected that any of the assumptions described above will prove to agree exactly with future experience, it is believed that the resulting costs and liabilities developed are reasonably accurate. The assumptions have been developed to be individually realistic.

#### VIII. PLAN PROVISIONS

The postretirement Group Life Insurance eligibility and benefit provisions are described in Appendix A. The valuation takes into consideration death benefits in excess of the \$50,000 limit set by the Deficit Reduction Act of 1984 (DEFRA). Certain participants are grandfathered and, accordingly, are not affected by DEFRA. The relative provisions of DEFRA are summarized in Appendix B.

#### IX. DEMOGRAPHIC DATA

The valuation was based on active and retiree census data as of January 1.

1991. The census data are summarized as follows:

	<u>Actives</u> *	Retirees**
Number	74,958	38,480
Average Age	41.8	67.9
Average Service	17.5	
Average Pav	36.200	

- \* Includes key employees. Key employees are included in value of the SFAS 106 Cost and APBO but are excluded in the determination of the company contributions.
- \*\* Includes retired employees who were key employees at the time of retirement.



## ACTUARIAL REPORT FOR 1991 REGULATORY COST UNDER SFAS 106 THE BELL ATLANTIC RETIREE GROUP LIFE INSURANCE PLAN

#### IX. DEMOGRAPHIC DATA (CONTINUED)

Exhibits IV and V provide detailed distributions of the active and retired participants, respectively.

Bell Atlantic Corporation is the source of the data.

#### X. ACTUARY'S STATEMENT

Calculations reported herein have been made on a basis consistent with my understanding of the Statement of the Financial Accounting Standards No. 106 (SFAS 106). Determination for purposes other than meeting employer financial accounting requirements (such as for purposes of measuring participant benefit security) may differ significantly from the results contained in this report.

The plans were assumed to continue indefinitely; however, this assumption should not be construed to mean that Bell Atlantic has an obligation to continue the plans.

Respectfully Submitted,

Thomas G. Bainbridge, ASA, MAAA Vice President and Consulting Actuary

January 30, 1992



# BELL ATLANTIC CORPORATION GROUP LIFE INSURANCE EXHIBIT I TRANSITION OBLIGATION (ASSET) (\$ THOUSANDS)

1)	APBO 1/1/91	\$381,042
2)	Plan Assets	429,434
3)	Transition Obligation (Asset) (1)-(2)	(\$48,392)



#### GROUP LIFE INSURANCE

#### EXHIBIT II

### COMPONENTS OF NET PERIODIC POSTRETIREMENT BENEFIT COST (\$ THOUSANDS)

1991

		Net Periodic Postretirement <u>Benefit Cost</u>
1)	Service Cosi	S 7,197
2)	Interest Cost	30,485
3)	Expected Return on Assets	31,677
4)	Amortization of Transition Asset	2.936
5)	Amortization of Prior Service Cost	0
6)	Amortization of Gains and (Losses)	0
Total	(1)+(2)-(3)-(4)+(5)-(6)	\$3,069



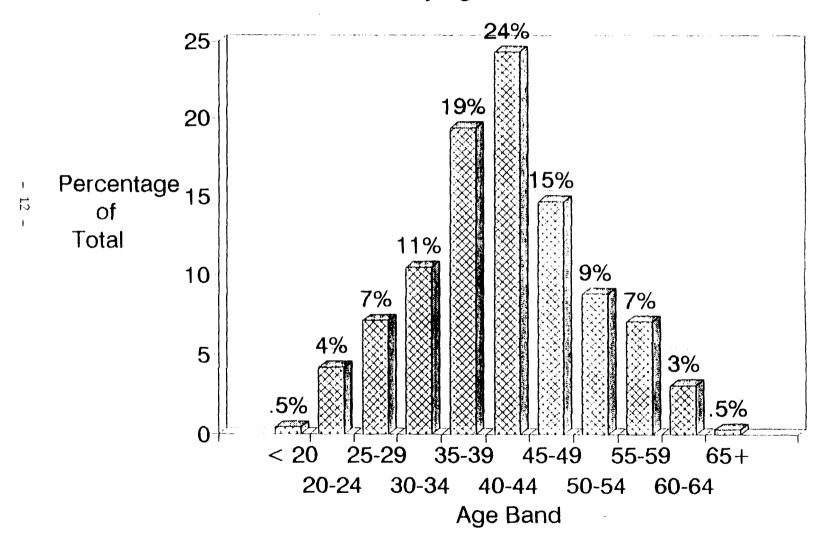
# BELL ATLANTIC CORPORATION GROUP LIFE INSURANCE EXHIBIT III ACCUMULATED POSTRETIREMENT BENEFIT OBLIGATION (\$ THOUSANDS)

	<u>APBO</u>
Retirees	\$189.829
Other Fully Eligible Plan Participants	50,191
Other Active Plan Participants	141,022
Total	\$381,042



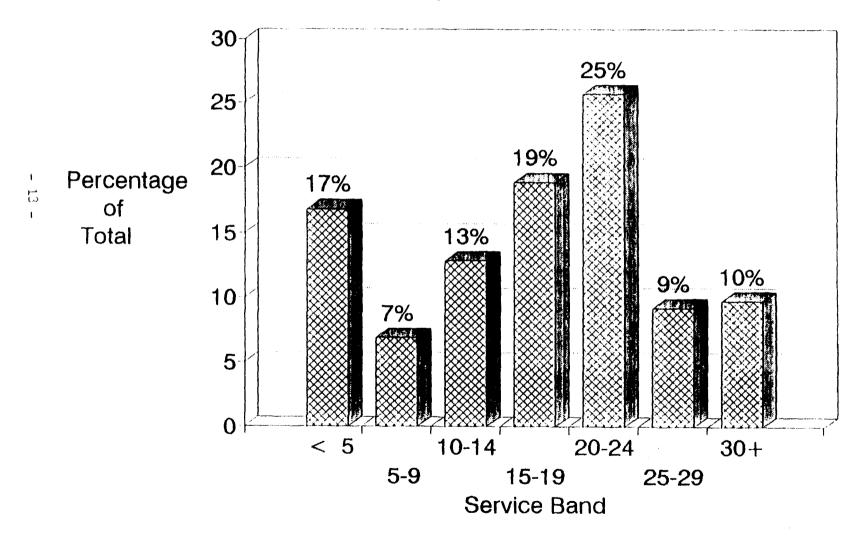
EXHIBIT IV
Bell Atlantic Group Life Employees

Census by Age as of 1/1/91



## EXHIBIT IV (Continued) Bell Atlantic Group Life Employees

Census by Service as of 1/1/91



#### BELL ATLANTIC CORPORATION GROUP LIFE INSURANCE EXHIBIT IV (Continued) ACTIVE DATA BY AGE AND SERVICE AS OF JANUARY 1. 1991

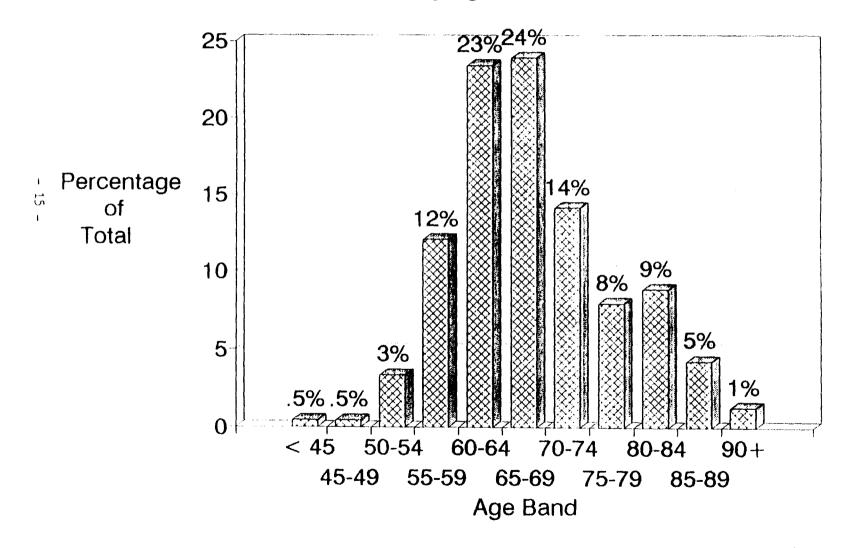
Age	0-4	5-9	Length of 10-14	Service 15-19	(Completed 20-24	Years) 25-29	30 & Over	TOTAL
Under 20	312	0	0	0	0	0	0	312
20-24	3,127	40	0	0	0	0	0	3,167
25-29	3,732	1,288	356	0	Э	0	0	5,376
30-34	2,171	1,839	3,430	423	Э	0	0	7,863
35-39	1,478	1,002	3,115	6,479	2,464	0	0	14,538
40-44	991	528	1,507	4.570	9,524	1.074	0	18,194
45-49	445	248	582	1.282	4,447	3.624	392	11.020
50-54	192	139	346	672	1,596	1.415	2.263	6,623
55-59	94	43	174	448	802	521	3,242	5,324
60-64	37	28	94	221	383	236	1,311	2,310
Over 64	4	11	25	36	49	19	87	231
TOTAL	12,583	5,166	9,629	14.131	19,265	6.889	7,295	74,958

The Average Age is 41.8. The Average Length of Service is 17.5.



EXHIBIT V
Bell Atlantic Group Life Retirees

Census by Age as of 1/1/91



## BELL ATLANTIC CORPORATION GROUP LIFE INSURANCE EXHIBIT V (Continued) RETIREE\* DATA BY AGE

AS OF JANUARY 1, 1991

Age	<u>Male</u>	<u>Female</u>	<u>Total</u>
Under 45	55	101	156
45-49	55	118	173
50-54	<del>1</del> 74	820	1.294
55-59	2,455	2,196	4.651
60-64	4,567	4,438	9.005
65-69	4.653	4,531	9,184
70-74	2,426	3.017	5.443
75-79	839	2,205	3,044
80-84	917	2,483	3,400
85-89	552	1.084	1.636
Over 89	151	343	494
TOTAL	17,144	21,336	38.480

The average age of the retirees is 67.9



<sup>\*</sup> Includes Service and Disability Pensioners.

#### Appendix A

### BELL ATLANTIC CORPORATION GROUP LIFE INSURANCE

#### SUMMARY OF POSTRETIREMENT ELIGIBILITY AND BENEFIT PROVISIONS

#### **ELIGIBILITY**

Under the current provisions of the plan all present retirees and active employees upon retirement are covered by group life insurance during retirement. In order to be eligible for coverage during retirement an employee must retire and be granted a Service or Disability Pension by the Company.

The retirement eligibility requirements are as follows:

Retirement	Eligibility		
Age		Minimum Years of Service	Type of Retirement
65	and	10	Service Pension
60	and	15	Service Pension
55	and	20	Service Pension
50	and	25	Service Pension
Any	Age and	30	Service Pension
Апу		15	Disability Pension

#### INSURANCE AMOUNTS DURING ACTIVE EMPLOYMENT

The Plan provides Basic Group Life Insurance and Accidental Death and Dismemberment Insurance during active employment. However, this report does not cover that insurance.



#### Appendix A

## BELL ATLANTIC CORPORATION GROUP LIFE INSURANCE SUMMARY OF POSTRETIREMENT ELIGIBILITY AND BENEFIT PROVISIONS (Continued)

#### INSURANCE AMOUNTS DURING RETIREMENT

For future retirements, the Basic Group Life Insurance after retirement will equal the annual rate of basic pay at retirement rounded to the next higher \$1,000 times the following percentage:

<u>Age</u>	Percentage
65 or less 66	1 <b>00%</b> 9 <b>0%</b>
67	80 <i>%</i>
68	7 <b>0%</b>
69	60 <i>%</i>
70 or more	50 <i>%</i>

"Annual basic pay" means annual rate of pay including bonuses, incentives and merit awards when they are a permanent part of compensation. Tour differentials and any differentials regarded as temporary or extra payments are excluded.

There is no AD&D insurance after retirement.



#### Appendix B

## BELL ATLANTIC CORPORATION GROUP LIFE INSURANCE SUMMARY OF DEFICIT REDUCTION ACT OF 1984

#### INTERNAL REVENUE CODE REQUIREMENTS

The enactment of the Deficit Reduction Act (DEFRA) on July 18, 1984 applied new rules and regulations to welfare benefit plans for tax years ending after December 31, 1985. The legislation added strict deduction rules that will limit the annual contributions made by employers to prefund welfare benefits. The legislation also established nondiscrimination requirements for welfare benefit plans similar to those traditionally applied to qualified retirement plans. Under DEFRA's definition, Bell Atlantic's basic group life insurance program is categorized as a welfare benefit plan since DEFRA applies to a welfare benefit plan maintaining retired lives reserves or similar accounts held for an employer by an insurance company.

#### Key Employees

If an employee participating in a postretirement life insurance plan maintained by an employer is a key employee, a separate account must be established for prefunding any postretirement life insurance benefits provided to that employee.

